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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,869	04/27/2007	Thomas Thoroe Scherb	VOI0290.US2	9711

7590  
Max W. Garwood  
Taylor & Aust  
P.O.Box 560  
Avilla, IN 46710

EXAMINER
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HUG, ERIC J

ART UNIT	PAPER NUMBER
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1791

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04/26/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,869	<b>Applicant(s)</b> SCHERB ET AL.	
	<b>Examiner</b> Eric Hug	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 146-208,226-230,277 and 294-302 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 146-208,226-230,277 and 294-302 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group I, claims 146-208, 226-230, 277, and 294-302, in the reply filed on March 15, 2010 is acknowledged. Because applicant did not distinctly and specifically point out any supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 209-225, 231-276, and 278-293 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 146-151, 173, 179, 191, 195, 202, 204-208, 226, 227, 230, 277, and 294-302 are rejected under 35 U.S.C. 102(a) as being anticipated by Herman et al (US 2003/0136018).

Herman discloses a paper machine for making a three-dimensional tissue web. The paper machine comprises a dewatering apparatus 34 which includes the combination of a drying suction roll 38, a felt 36, and an imprinting band 14 which imparts three-dimensional structure to web 12. The web is sandwiched between the felt 36 and the imprinting band 14 as it is conveyed about the drying suction roll 38. The felt is in contact with the suction roll. In this arrangement, air is drawn by suction first through the imprinting band, then the web, then the felt, and into the suction roll.

Regarding the system of claim 146, Herman discloses each of the claimed features as follows: a drying apparatus (drying suction roll 38), a permeable structured fabric (imprinting band 14) carrying a web over the drying apparatus, a permeable dewatering fabric (felt 36) contacting the web and also being guided over the drying apparatus, and a mechanism for applying pressure (air drawn by suction) to the structured fabric, web, and dewatering fabric at the drying apparatus.

Regarding claim 147, the imprinting fabric (structured fabric) is part of a drying process wherein air is passed through the fabric, web, and felt, therefore it is effectively a TAD (through-air drying) fabric. The apparatus also has a suction roll 38 is described above.

Regarding claim 148, the apparatus has a suction roll 38.

Regarding claim 149, a suction box (vacuum box 40) is also provided.

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Regarding claim 150, the suction is applied by the suction roll to the side of the dewatering fabric in contact with the suction roll, which side is opposite the side contacting the web.

Regarding claim 151, the claimed direction of air relative to the drying arrangement is described above. See also the arrows of the Figures.

Regarding claims 173, 179, 191, 195, 202, 204-208 and pertaining to the structure of the felt 36 (the claimed permeable dewatering fabric), see paragraphs [0029] to [0039] for the structural and functional features regarding the felt. The felt may comprise a foamed layer ([0029]), a woven fabric combined with a spectra membrane ([0030] to [0034]), or an anti-rewetting membrane ([0035] to [0039]). The anti-rewetting membrane can include at least one air distribution fabric layer, a perforated plastic film layer (re: claim 191), or a perforated film layer laminated or applied to an air distribution fabric layer (re: claims 202, 204-208). The air distribution fabric layer can include a woven fabric of a plurality of yarns (re: claim 195). A woven fabric comprises warp and weft yarns (re: claims 173, 179).

Regarding the system of claim 226, Herman discloses each of the claimed features as follows: a vacuum roll (drying suction roll 38), a permeable structured fabric (imprinting band 14) carrying a web over the vacuum roll, a permeable dewatering fabric (felt 36) contacting the web and also being guided over the vacuum roll, and a mechanism for applying pressure (air drawn by suction) to the structured fabric, web, and dewatering fabric at the vacuum roll.

Regarding claim 227, a pressure hood 52 can be provided (paragraphs [0018], [0047], [0070]).

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Regarding the method of drying a web of claim 230, Herman discloses each of the claimed features as follows: a vacuum roll (drying suction roll 38), a permeable structured fabric (imprinting band 14) carrying a web over the vacuum roll, a permeable dewatering fabric (felt 36) contacting the web and also being guided over the vacuum roll, a mechanism for applying pressure to the structured fabric, web, and dewatering fabric at the vacuum roll via an applied mechanical pressure (applied pressure field, see paragraphs [0004], [0010]; preferably by a press nip, paragraph [0011]) and by suctioning air during the mechanical pressing (air drawn by the suction roll). This combination also reads on the more general methods of claims 277 and 294.

Regarding claims 295-298, dwell times are disclosed in paragraph [0044].

Regarding claim 299, the suction roll is a device which applies a vacuum.

Regarding claims 300-302, pressures are disclosed in paragraph [0085].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 152-172, 174-178, 180-190, 192-194, 196-201, 203, 228, and 229 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman et al (US 2003/0136018) in view of Crook (US 2005/0167067). Crook qualifies as prior art under 35 U.S.C. 102(e).

The paper machine of Herman and the dewatering fabric disclosed therein as they pertain to claim 146 are described above. The dewatering fabric is described particularly in paragraphs

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[0029] to [0039]. The features of the dewatering fabric given by claims 152-172, 174-178, 180-190, 192-194, 196-201, and 203 are not expressly disclosed therein by Herman. The features of claims 228 and 229 regarding a drying system further comprising a belt press and permeable belt are not disclosed either by Herman.

Analogous to Herman, Crook discloses a paper machine comprising a pressing/drying apparatus having the combination of a drying suction roll 18, a structured fabric 14 which imparts three-dimensional structure to a web 12, a dewatering fabric 20, and a belt press 22 with a permeable belt 24. A vacuum is applied at the suction roll to draw air through the permeable belt, structured fabric, web, and dewatering fabric. This arrangement is analogous to the arrangement of corresponding features in Herman, additionally having the permeable belt.

In Crook, the features of the dewatering fabric are described in paragraphs [0024] to [0033] and in the claims. These include all the structures and components therein associated with the claimed features. At the time of the invention, it would have been obvious to one skilled in the art to utilize a dewatering fabric having any of the alternative structures as disclosed by Crook in the paper machine of Herman for accomplishing the same purpose within the drying apparatus. It would also have been obvious to provide the drying apparatus of Herman with a belt press and permeable belt as taught by Crook to enhance drying of the web.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 146, 226, 277, and 294 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 41-49, and 59 of U.S. Patent No. 7,476,294. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 146 and 226 are anticipated by any of claims 1 and 41-48 of US 7,476,294.

Claims 277 and 294 are anticipated by any of claims 49 and 58 of US 7,476,294.

2. Claims 146, 226, 230, 277, and 294 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 75, and 79 of U.S. Patent



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No. 7,476,293. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 146 and 226 are anticipated by any of claims 1 and 75 of US 7,476,293.

Claims 230, 277, and 294 are anticipated by claim 79 of US 7,476,293.

3. Claims 230, 277, and 294 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 18 of U.S. Patent No. 7,351,307.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 230, 277, and 294 are anticipated by any of claims 1 and 18 of US 7,351,307.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sanford (US 3,301,746)

Nykopp (US 3,655,507)

Emson (US 3,974,026)

Morton (US 4,102,737)

Cowan (US 4,888,096)

Hermans (US 6,454,904)

Klerelid (US 6,488,816)

Hermans et al (US 6,497,789)

Beck (US 6,616,812)

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Scherb et al (US 2002/0060046)

Beck (US 2003/0056925)

Beck (US 2004/0180596)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is (571) 272-1192.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric Hug/  
Primary Examiner, Art Unit 1791